

**The claimed invention is:**

1. A method for creating a library of pump data on a computer having a database, each pump program, the pump data being organized into sets of program data, each set of program data being available for batch downloading to a medical pump and including data items for controlling operation of the medical pump, the method comprising:

entering a plurality of data items into a database on the computer, the plurality of data items forming a set of program data, at least some of the data items establishing parameters for controlling operation of a medical pump; and assigning at least one data key to the set of program data, the data key identifying the set of program data.

2. The method of claim 1 wherein the acts of:

entering a plurality of data items into a database includes entering the plurality of data items into a program data record in the database; and

assigning at least one data key to the set of program data includes entering the data key into a data key record and linking the data key record to the program data record.

3. The method of claim 2 wherein the act of assigning at least one data key to the set of program data further includes: entering an identification code selected from the group consisting essentially of a patient I.D., a therapy I.D., and a fluid I.D., wherein the patient I.D. is a code identifying a patient, the therapy I.D. is a code identifying a therapy administered using a medical pump, and the fluid I.D. is a code identifying a fluid that is administered using a medical pump.

4. The method of claim 3 wherein the computer is in data communication with a scanner, the method further comprising:

scanning a bar code with the scanner; and

entering the bar code into the computer,

5 wherein the act of assigning at least one data key to the set of program data includes assigning the bar code to the set of program data.

5. The method of claim 3 wherein the computer is in data communication with a medical pump, the method further comprising uploading a set of program data items from the pump.

10 6. A computer storage medium contain a library of pump data, the computer storage medium be created by the method set forth in claim 1.

7. An apparatus for maintaining a library of program data for medical pumps, the apparatus comprising:

15 memory loaded with a database, the database including a plurality of program data records and a plurality of data key records, each program data record containing a set of program data items, at least some of the program data items included in the database for controlling operation of a medical pump, each data key record containing a data key and each data key identifying one of the data program records;

20 a database management system programmed to link a data key to a set of program data.

8. The apparatus of claim 7 further comprising a scanner in data communication with the database management system, the database management system being further

programmed to receive a code scanned by the scanner, save the code in a data key record, and link the code to a set of program data, the code being a data key.

9. The apparatus of claim 7 further comprising a medical pump, the medical pump storing a set of program data, the database management system being further

5 programmed to receive the set of program data from the medical pump and save the set of program data as a record in the database.

10. An apparatus for batch programming a medical pump, the apparatus comprising:  
memory loaded with a database, the database including a plurality of program

data records and a plurality of data key records, each program data record

10 containing a set of program data items, at least some of the program data

items included in the database for controlling operation of a medical

pump, each data key record containing a data key and each data key

identifying one of the data program records;

a data output configured for data communication with a programmable medical

15 pump; and

a processor in electrical communication with the memory and the data output, the

processor configured to retrieve a set of program data from the database

and batch download the set of program data to the medical pump.

11. The apparatus of claim 10 further comprising a serial communication cable

20 connected to the data output.

12. The apparatus of claim 10 further comprising a medical pump in data communication with the data output.

13. The apparatus of claim 10 wherein each data key record includes first and second fields, the first field for storing an identification code and the second field from storing a name in prose.

14. The apparatus of claim 10 wherein each data key record includes fields for a patient I.D., a therapy I.D., and a fluid I.D.

15. The apparatus of claim 10 wherein the processor is programmed:  
to generate a user interface, the user interface including a plurality of graphical fields for  
program data and to permit.

16. A method for batch programming a medical pump, the method comprising:  
selecting a set of program data, the set of program data including data items for  
controlling operation of a medical pump; and  
batch downloading the set of program data to the medical pump, wherein the set  
of program data is downloaded to the medical pump without intervening  
action by a user after the first data item is downloaded to the computer..

17. The method of claim 16 wherein an information management system is loaded on a computer and the information management system includes a database storing a plurality of data keys and a plurality of program data sets, and wherein the act of selecting a set of program data comprises:

entering a data key into the information management system;

referencing the data key to a program data set; and

and retrieving the referenced program data set from the database.

18. The method of claim 17 wherein the act of entering a data key includes scanning a bar code.

19. The method of claim 16 wherein an information management system is loaded on a computer and the information management system includes a database storing a plurality of data keys and a plurality of program data sets and the act of batch downloading the set of program data includes downloading the set of program data from the computer to the medical pump, the method further comprising:

uploading the set of program data from the medical pump to the computer after it is downloaded to the medical pump;

comparing the set of program data that was download to the medical pump to the

set of program data that was uploaded from the medical pump; and

generating an error if the set of program data that was downloaded from the

medical pump is not identical to the program data that was uploaded from the medical pump.

20. A propagated signal on a carrier detectable by a computing system and encoding a set of program data for controlling operation of a medical pump, the propagated signal

being encoded according to the method of claim 16.